

Remarks

This Amendment is in response to the Office Action dated **June 6, 2007**.

Claim 1 has been amended to delete the coma located in the last line of the claim.

Rejections

35 U.S.C. §103(a)

I. Cox et al. in view of Garrison et al., and further in view of Erbel et al.,

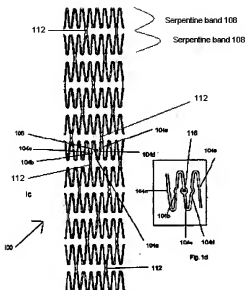
Claims 1, 2, 4, 5, 7-10, 15, 26-28, 34 and 35 are rejected under 35 U.S.C. §103(a) as being unpatentable over Cox et al. (USPN 6,652,579) in view of Garrison et al. (USPN 6,520,984) and further in view of Erbel et al. (US 2004/0116998).

Applicants traverse the rejection.

Claim 1 is directed to a medical device having, among other features, a first serpentine band and a second serpentine band adjacent thereto, each serpentine band formed of interconnected struts and having a distal end and a proximal end, each strut extending between a peak at the distal end of the serpentine band and a trough at the proximal end of the serpentine band, at least one of the struts being a special strut.

Each special strut has a first side with a first region of first curvature and a second side with a second region of second curvature, the first region opposite the second region, the first region curving in a direction opposite to the second region relative and a radiopaque marker between the first and second regions, and a cover on at least one region of the medical device.

Applicants have reproduced FIGS. 1c and 1d below in order to illustrate the location of the special strut 104(a):



Applicants successfully argued in the Reasons for Pre-Appeal Conference mailed 2/16/07, that the that the special strut 104a, recited in independent claim 1, is located within a single serpentine band 108 and extends from a peak at the distal end of the serpentine band to a trough at the proximal end of the serpentine band, while the primary reference, Cox et al. failed to disclose such a strut. Combining the covering element disclosed by Erbel et al. with the stent structure disclosed by Cox et al. failed to render claim 1 obvious because the stent structure of Cox et al. is different.

The Examiner has now added Garrison et al. to the combination, stating that "Cox does not disclose that the special strut extends from a peak at the distal end of the serpentine band to a trough at the proximal end of the serpentine band. Garrison discloses a stent (37, Fig. 1) with

a radiopaque marker (42) extending from a peak at the distal end of the serpentine band to a trough at the proximal end of the serpentine band. Garrison also discloses a stent (72, Fig. 2) with a radiopaque marker (79) extending from a peak/trough of one serpentine band to a peak/trough of another serpentine band, just as is disclosed by Cox.” Office Action, page 3, paragraphs 5 and 6.

Applicants disagree.

Applicants have reproduced FIG. 1 and FIG. 2 of Garrison below for illustration:

Applicants submit that FIG. 1 of Garrison et al. illustrates a stent graft assembly 10, having a stent 12 covered by a polymeric sleeve 13. See col. 1, lines 63-66. “In order to ensure that the polymeric sleeve 13 remains in the desired position on the stent 12, security rings 36 and 37 have been positioned over the outer ends of the sleeve 13.” Garrison et al., col. 2, lines 33-35. Therefore, reference numeral 37 does not refer to the stent, it refers to a ring that is not connected to the stent whatsoever, but rather is disposed on top of the polymeric sleeve 13 which is disposed on top of the stent 12. Radiopaque marker 42 is part of the ring 37, not the stent 12.

FIG. 1 of Garrison et al. is reproduced below for convenience:

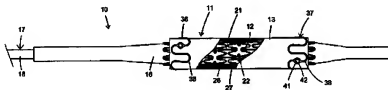
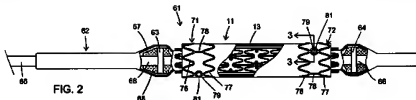


FIG. 2 of Garrison et al. is reproduced below for purposes of illustration:



Applicants agree that the radiopaque marker (79) extend from a peak/trough of one serpentine band to a peak/trough of another serpentine band....”as asserted in the Office Action.

The special strut 104(a) recited in Applicants’ independent claim 1, however, *is located within a single serpentine band 108 and extends from a peak at the distal end of the serpentine band to a trough at the proximal end of the serpentine band.* It does not connect adjacent serpentine bands. Rather, Applicants’ connectors 112, connect adjacent struts.

As admitted in the Office Action, Cox et al. fails to disclose such a strut (Office Action, page 3, paragraph 5). Garrison et al. fails to disclose such a strut and therefore, the combination lacks the disclosure of the special strut located within a single serpentine band that extends from a peak at the distal end of the serpentine band to a trough at the proximal end of the serpentine band as recited in Applicants’ independent claim 1. Neither reference has this feature, and neither does the combination.

Combining the cover of Erbel et al. still fails to suggest a stent having a special strut as recited in independent claim 1.

Claims 2, 4, 5, 7-10, 15, 34 and 35 depend from claim 1 and are not obvious over this combination for at least the reasons that claim 1 is not obvious over this combination.

Claim 26 also recites, among other features, “*each special strut extending from the*

peak of the serpentine band to the trough of the serpentine band and having a radiopaque marker therebetween.”

Therefore, claim 26 is also not obvious over this combination for the same reasons that claim 1 is not obvious over this combination.

Claims 27 and 28 depend from claim 26 and are not obvious over this combination for at least the reasons that claim 26 is not obvious over this combination.

Applicants respectfully request withdrawal of the rejection of claims 1, 2, 4, 5, 7-10, 15, 26-28, 34 and 35 under 35 U.S.C. §103(a) as being unpatentable over Cox (USPN 6,652,579) in view of Garrison (USPN 6,520,984) and further in view of Erbel (US 200410116998).

II. Wolinsky et al., in view of Burgermeister, and further in view of Erbel et al.

Claims 1, 2, 4, 5, 7-10, 15, 26-28, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolinsky (USPN 6,730,116) in view of Burgermeister (USPN 6,790,227) and further in view of Erbel et al. (USpub 200410116998).

Applicants traverse the rejection.

Claim 1 is directed to a medical device having, among other features, a first serpentine band and a second serpentine band adjacent thereto, each serpentine band formed of interconnected struts and having a distal end and a proximal end, each strut extending between a peak at the distal end of the serpentine band and a trough at the proximal end of the serpentine band, at least one of the struts being a special strut.

Each special strut has a first side with a first region of first curvature and a second side with a second region of second curvature, the first region opposite the second region, the

first region curving in a direction opposite to the second region relative and a radiopaque marker between the first and second regions, and a cover on at least one region of the medical device.

The first serpentine band is connected to the second serpentine band by a connector which extends from one of the ends of the first serpentine band to one of the ends of the second serpentine band.

In the Office Action, Burgermeister has been combined with Wolinsky et al. because “Wolinsky et al. does not disclose that the serpentine bands are connected by a connector, which extends from one of the ends of the first band to one of the ends of the second band....Burgermeister discloses a stent with serpentine bands having peaks and troughs with each band connected to the adjacent band by connectors....Burgermeister states that this connector is advantageous because the overall length of the stent is maintained during expansion.” See Office Action, page 6, paragraphs 13 and 14.

Applicants disagree and submit that in fact, Burgermeister would not be combined with Wolinsky et al. for this purpose because in the Background of the Invention, Wolinsky et al. disclose that Globerman, U.S. Patent No. 5,776,161, already provides a stent with connectors where wherein the overall length of the stent is maintained during expansion:

Globerman discloses an expandable stent having a small initial diameter, flexibility along its longitudinal axis prior to expansion and minimization of rigid local strain on the stent material by the presence of rotation joints which have minimal strain during stent expansion. The stent is substantially the same length before and after expansion and being flexible longitudinally when constrained, it is easy to deliver. However additional improvements in longitudinal flexibility in the crimped stent during delivery and scaffolding after delivery are still desired.

Wolinsky et al., col. 2, lines 52-62 (emphasis added).

Wolinsky et al. finds the Globerman stent to need improvement in”....longitudinal

flexibility in the crimped stent during delivery and scaffolding after delivery....” See col. 2, lines 59-62.

In fact, because Wolinsky et al. already have the features required for maintaining stent length upon expansion, and state that additional improvements are needed, they are actually leading one of skill in the art away from the Burgermeister disclosure. Thus, it can be assumed that the Burgermeister stent connectors are insufficient to provide these improvements.

According to KSR, one of ordinary skill in the art must not only be able to make the predictable variation to the device, they must also be able to see the benefit in doing so. If such a benefit cannot be seen, the combination does not preclude patentability under 35 U.S.C. §103(a). See *KSR International v. Teleflex Inc.*, U.S. Supreme Court No. 04-1350 (April 30, 2007).

As one of ordinary skill in the art would not look to the Burgermeister reference to modify the Wolinsky et al. stent because the stent already has connectors that maintain the overall stent length before and after expansion, the combination fails to render claim 1 obvious. Combining the cover of Erbel et al. with Wolinsky et al. fails to suggest a medical device with such connectors as recited in claim 1.

Claims 2, 4, 5, 7-10, 15, 34 and 35 depend from claim 1 and are not obvious over this combination for at least the reasons that claim 1 is not obvious over this combination.

Independent claim 26 and claim 27 dependent therefrom are also not obvious over this combination for at least the reasons that claim 1 is not obvious over the combination. Simply, because Burgermeister would not be combined with Wolinsky et al. for the reasons set forth herein.

Applicants respectfully request withdrawal of the rejection of claims 1, 2, 4, 5, 7-

10, 15, 26-28, 34 and 35 under 35 U.S.C. 103(a) as being unpatentable over Wolinsky (USPN 6,730,116) in view of Burgermeister (USPN 6,790,227) and further in view of Erbel et al. (US Pub. 200410116998).

III. Wolinsky et al. in view of Burgermeister, and further in view of Erbel et al., Cox et al., in view of Garrison et al., and further in view of Erbel et al. and further in view of Barone

Claim 6 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Wolinsky in view of Burgermeister and further in view of Erbel; and Cox in view of Garrison and further in view of Erbel as applied to claim 1 above, and further in view of Barone (USPN 6,613,078).

The combination of Wolinsky et al., Burgermeister and Erbel et al. has been discussed above. Claim 1 is patentable over this combination for at least the reasons provided above. Claim 6 depends from claim 1 and is patentable for at least the reasons that claim 1 is patentable over Wolinsky et al., Burgermeister and Erbel et al.

Cox et al., Garrison et al. and Erbel et al. have been discussed above. Claim 1 is patentable over this combination for the reasons given above. Combining the two stent covers of Barone, as asserted in the Office Action, with Cox et al., Garrison et al. and Erbel et al. fails to render claim 1 patentable because the combination fails to provide a most notable feature of claim 1, i.e. the special strut as recited therein. Claim 6 is patentable over this combination for at least the reasons that claim 1 is patentable over this combination.

Applicants respectfully request withdrawal of the rejection of claim 6 under 35 U.S.C. §103(a) as being unpatentable over Wolinsky et al. in view of Burgermeister and further in

view of Erbel et al.; and Cox et al. in view of Garrison et al. and further in view of Erbel et al. as applied to claim 1 above, and further in view of Barone (USPN 6,613,078).

IV. Cox et al. in view of Garrison et al. and further in view of Erbel et al.; and Wolinsky et al. in view of Burgermeister and further in view of Erbel et al., as applied to claim 1, above, and further in view of admitted prior art (admission)

Claims 13 and 14 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Cox et al. in view of Garrison et al. and further in view of Erbel et al.; and Wolinsky et al. in view of Burgermeister and further in view of Erbel et al. as applied to claim 1 above, and further in view of admitted prior art (admission).

Claims 13 and 14 depend from claim 1.

Claim 1 has been discussed above and is patentable over Cox et al. in view of Garrison et al. and further in view of Erbel et al. for the reasons provided above. The combination fails to provide the special strut as recited in claim 1.

Combining plating, painting, pressing, sawing or welding or any other means known in the art with this combination of references still fails to provide the special strut recited in claim 1. Therefore, claims 13 and 14 are patentable over this combination for at least the reasons that claim 1 is patentable over this combination.

Claim 1 is also patentable over Wolinsky et al. in view of Burgermeister and further in view of Erbel et al. for at least the reasons as discussed above. One of ordinary skill in the art would simply not modify the Wolinsky et al. stent with the features, e.g. connectors, of Burgermeister, because the Wolinsky et al. already has connectors that maintain overall stent length upon expansion.

Combining plating, painting, pressing, sawing or welding or any other means known in the art with this combination of references still fails to provide the special strut recited in claim 1 and claims 13 and 14 are patentable over this combination for at least the reasons that claim 1 is patentable over this combination.

Applicants respectfully request withdrawal of the rejection of claims 13 and 14 under 35 U.S.C. §103(a) as being unpatentable over Cox et al. in view of Garrison et al. and further in view of Erbel et al.; and Wolinsky et al. in view of Burgermeister and further in view of Erbel et al. as applied to claim 1 above, and further in view of admitted prior art (admission).

CONCLUSION

Claims 1, 2, 4-10, 13-18, 22-28, 34 and 35 are pending in the application.

Applicants have addressed each of the issues presented in the Office Action. Based on the foregoing, Applicants respectfully request reconsideration and an early allowance of the claims as presented. Should any issues remain, the attorney of record may be reached at (952)563-3011 to expedite prosecution of this application.

Respectfully submitted,

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